



AutoDome Junior HD

VJR Series



BOSCH

en Installation Manual

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1 Safety

1.1 Important Safety Instructions

Read, follow, and retain for future reference all of the following safety instructions. Heed all warnings on the unit and in the operating instructions before operating the unit.

1. **Cleaning** - Unplug the unit from the outlet before cleaning. Follow any instructions provided with the unit. It is generally sufficient to use a dry cloth for cleaning, but a moist lint-free cloth or leather shammy may also be used. Do not use liquid cleaners or aerosol cleaners.
2. **Heat sources** - Do not install the unit near any heat sources such as radiators, heaters, stoves, or other devices (including amplifiers) that produce heat.
3. **Ventilation** - Any openings in the unit housing are provided for ventilation to prevent overheating and ensure reliable operation. Do not block or cover these openings. Do not place the unit in an enclosure unless proper ventilation is provided, or the manufacturer's instructions have been adhered to.
4. **Water** - Do not use this unit near water, for example near a bathtub, washbowl, sink, laundry basket, in a damp or wet basement, near a swimming pool, or in any area classified as a wet location. To reduce the risk of fire or electrical shock, do not expose this unit to rain or moisture.
5. **Object and liquid entry** - Never push objects of any kind into this unit through openings, as they may touch dangerous voltage points or short out parts, which could result in a fire or electrical shock. Never spill liquid of any kind on the unit. Do not place objects filled with liquids, such as vases or cups, on the unit.
6. **Lightning** - For added protection during a lightning storm, or when leaving this unit unattended and unused for long periods, unplug the unit from the wall outlet and disconnect the cable system. This will prevent damage to the unit from lightning and power line surges.

7. **Control adjustment** - Adjust only those controls specified in the operating instructions. Improper adjustment of other controls may cause damage to the unit. Use of controls or adjustments, or performance of procedures other than those specified, may result in hazardous radiation exposure.
8. **Overloading** - Do not overload outlets and extension cords. This can cause fire or electrical shock.
9. **Power disconnect** - Units with or without ON/OFF switches have power supplied whenever the power cord is inserted into the power source; however, the unit is operational only when the ON/OFF switch is in the ON position. The power cord is the main power disconnect device for switching off the voltage for all units.
10. **Power sources** - Operate the unit only via the type of power source indicated on the label. Before proceeding, be sure to disconnect the power from the cable being connected to the unit.
 - For battery powered units, refer to the operating instructions.
 - For units supplied by an external power source, use only the recommended or approved power supplies.
 - For limited power source units, this power source must comply with *EN60950*. Substitutions may damage the unit or cause fire or shock.
 - For 24 VAC units, the VG4-A-PSUxx Power Supply is recommended to comply with EN 50130-4 Main Supply Voltage Dips and Short Interruption requirement and voltage applied to the unit's power input should not exceed +/- 10% or 21.6-26.4 VAC. User-supplied wiring must comply with local electrical codes (Class 2 power levels). Do not ground the supply at the terminals or at the unit's power supply terminals.
 - If unsure of the type of power supply to use, contact your dealer or local power company.

11. **Servicing** - Do not attempt to service this unit yourself. Opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
12. **Damage requiring service** - Unplug the unit from the main AC power source and refer servicing to qualified service personnel when any damage to the equipment has occurred, for example if:
 - the power supply cord or plug is damaged
 - exposure to moisture, water, and/or inclement weather (rain, snow etc.)
 - liquid has been spilled in or on the equipment
 - an object has fallen into the unit
 - the unit has been dropped or the unit cabinet is damaged
 - the unit exhibits a distinct change in performance
 - the unit does not operate normally when the user correctly follows the operating instructions.
13. **Replacement parts** - Be sure the service technician uses replacement parts specified by the manufacturer, or that they have the same characteristics as the original parts. Unauthorized substitutions may cause fire, electrical shock, or other hazards.
14. **Safety check** - Safety checks should be performed on completion of service or repairs to the unit, to ensure that the unit is in proper operating condition.
15. **Installation** - Install in accordance with the manufacturer's instructions and in accordance with applicable local codes.
16. **Attachments, changes, or modifications** - Only use attachments/accessories specified by the manufacturer. Any change to or modification of the equipment not expressly approved by Bosch could void the warranty or, in the case of an authorization agreement, authority to operate the equipment.

1.2 Safety Precautions



DANGER!

This symbol indicates an imminently hazardous situation such as “Dangerous Voltage” inside the product. If not avoided, this will result in an electrical shock, serious bodily injury, or death.



WARNING!

Indicates a potentially hazardous situation. If not avoided, this may result in minor or moderate injury. Alerts the user to important instructions accompanying the unit.

CAUTION!

Indicates a potentially hazardous situation. If not avoided, this may result in damage to property or risk of damage to the unit.



NOTICE!

This symbol indicates information or a company policy that relates directly or indirectly to the safety of personnel or protection of property.

1.3 Important Notices



Accessories - Do not place this unit on an unstable stand, tripod, bracket, or mount. The unit may fall, causing serious injury to persons and/or severe damage to the unit. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer. When a cart is used, exercise caution and care when moving the cart/apparatus combination to avoid tipping it over, which could result in injury. Quick stops, excessive force, or uneven surfaces may cause the cart/unit combination to overturn. Mount the unit in line with the manufacturer's instructions.

All-pole power switch - Incorporate an all-pole power switch, with a contact separation of at least 3 mm in each pole, into the electrical installation of the building. If it is needed to open the housing for servicing and/or other activities, use this all-pole

switch as the main disconnect device for switching off the voltage to the unit.

Camera grounding - When mounting the camera in potentially damp environments, ensure the system is grounded through the metal housing of the unit (see section: Connecting the Power).

Camera signal - Protect the cable with a primary protector if the camera signal is over 140 feet, in accordance with *NEC800 (CEC Section 60)*.

Coax grounding:

- Ground the cable system if connecting an outside cable system to the unit.
- Connect equipment to the unit's inputs only after this unit has had its grounding plug connected to a grounded outlet or its ground terminal is properly connected to a ground source.
- Disconnect the unit's input connectors from equipment before disconnecting the grounding plug or grounding terminal.
- Follow proper safety precautions, such as grounding, for any device connected to this unit.

U.S.A. models only - *Section 810* of the *National Electrical Code, ANSI/NFPA No. 70*, provides information regarding proper grounding of the mount and supporting structure, grounding of the coax to a discharge unit, size of grounding conductors, location of discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.



Your Bosch product was developed and manufactured with high-quality material and components that can be recycled and reused. This symbol means that electronic and electrical appliances that have reached the end of their service life must be collected and disposed of separately from household waste material. Separate collecting systems are usually in place for disused electronic and electrical products. Please dispose of these units at an environmentally compatible recycling facility, in line with *European Directive 2002/96/EC*.

Environmental statement - Bosch has a strong commitment to the environment. This unit has been designed to respect the environment as much as possible.

Electrostatic-sensitive device - Take proper CMOS/MOS-FET handling precautions to avoid electrostatic discharge.

NOTE: You must wear grounded wrist straps and observe proper ESD safety precautions when handling the electrostatic-sensitive printed circuit boards.

Fuse rating - For security protection of the device, the branch circuit protection must be secured with a maximum fuse rating of 16 A. This must be in accordance with *NEC800 (CEC Section 60)*.

Grounding and polarization - This unit may be fitted with a polarized alternating current line plug (a plug with one blade wider than the other blade). This safety feature allows the plug to fit into the power outlet in only one way. If unable to insert the plug fully into the outlet, contact a locally certified electrician to replace the obsolete outlet. Do not defeat the safety purpose of the polarized plug.

Alternatively, this unit may be fitted with a 3-pole grounding plug (a plug with a third pin for earth grounding). This safety feature allows the plug to fit into a grounded power outlet only. If unable to insert the plug into the outlet, contact a locally certified electrician to replace the obsolete outlet. Do not defeat the safety purpose of the grounding plug.

Outdoor signals - The installation for outdoor signals, especially regarding clearance from power and lightning conductors and transient protection, must be in accordance with *NEC725* and *NEC800 (CEC Rule 16-224 and CEC Section 60)*.

Moving - Disconnect the power before moving the unit. Move the unit with care.

PoE (Indoor models only) - Never supply power via the Ethernet connection (PoE) when power is already supplied via the power connector.

Permanently connected equipment - Incorporate a readily accessible disconnect device in the building installation wiring.

Pluggable equipment - Install the socket outlet near the equipment so it is easily accessible.

Power disconnect - Units have power supplied whenever the power cord is inserted into the power source. The power cord is the main power disconnect for all units.

Power lines - Do not locate the camera near overhead power lines, power circuits, electrical lights, or anywhere where it might come into contact with power lines, circuits, or lights.

SELV

All the input/output ports are Safety Extra Low Voltage (SELV) circuits. SELV circuits should only be connected to other SELV circuits.

Because the ISDN circuits are treated like telephone-network voltage, avoid connecting the SELV circuit to the Telephone Network Voltage (TNV) circuits.

Video loss - Video loss is inherent to digital video recording; therefore, Bosch Security Systems cannot be held liable for any damage that results from missing video information. To minimize the risk of lost digital information, Bosch Security Systems recommends multiple, redundant recording systems, and a procedure to back up all analog and digital information.



NOTICE! This is a class A product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC & ICES INFORMATION

(U.S.A. and Canadian Models Only)

This device complies with *part 15* of the *FCC Rules*. Operation is subject to the following conditions:

- this device may not cause harmful interference, and
- this device must accept any interference received, including interference that may cause undesired operation.

Note

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules and ICES-003 of Industry Canada. These limits are

designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and radiates radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his expense.

Intentional or unintentional modifications not expressly approved by the party responsible for compliance shall not be made. Any such modifications could void the user's authority to operate the equipment. If necessary, the user should consult the dealer or an experienced radio/television technician for corrective action.

The user may find the following booklet, prepared by the Federal Communications Commission, helpful: How to Identify and Resolve Radio-TV Interference Problems. This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

INFORMATIONS FCC ET ICES

(modèles utilisés aux États-Unis et au Canada uniquement)

Ce produit est conforme aux normes FCC partie 15. La mise en service est soumise aux deux conditions suivantes:

- cet appareil ne peut pas provoquer d'interférence nuisible et
- cet appareil doit pouvoir tolérer toutes les interférences auxquelles il est soumis, y compris les interférences qui pourraient influencer sur son bon fonctionnement.

AVERTISSEMENT: Suite à différents tests, cet appareil s'est révélé conforme aux exigences imposées aux appareils numériques de Classe A en vertu de la section 15 du règlement de la Commission fédérale des communications des États-Unis (FCC). Ces contraintes sont destinées à fournir une protection raisonnable contre les interférences nuisibles quand l'appareil est utilisé dans une installation commerciale. Cette appareil

génère, utilise et émet de l'énergie de fréquence radio, et peut, en cas d'installation ou d'utilisation non conforme aux instructions, générer des interférences nuisibles aux communications radio. L'utilisation de ce produit dans une zone résidentielle peut provoquer des interférences nuisibles. Le cas échéant, l'utilisateur devra remédier à ces interférences à ses propres frais.

Au besoin, l'utilisateur consultera son revendeur ou un technicien qualifié en radio/télévision, qui procédera à une opération corrective. La brochure suivante, publiée par la Commission fédérale des communications (FCC), peut s'avérer utile : « How to Identify and Resolve Radio-TV Interference Problems » (Comment identifier et résoudre les problèmes d'interférences de radio et de télévision). Cette brochure est disponible auprès du U.S. Government Printing Office, Washington, DC 20402, États-Unis, sous la référence n° 004-000-00345-4.

AVERTISSEMENT: Ce produit est un appareil de Classe A. Son utilisation dans une zone résidentielle risque de provoquer des interférences. Le cas échéant, l'utilisateur devra prendre les mesures nécessaires pour y remédier.

Disclaimer

Underwriter Laboratories Inc. ("UL") has not tested the performance or reliability of the security or signaling aspects of this product. UL has only tested fire, shock and/or casualty hazards as outlined in UL's *Standard(s) for Safety for Information Technology Equipment, UL/IEC 60950-1*. UL Certification does not cover the performance or reliability of the security or signaling aspects of this product.

UL MAKES NO REPRESENTATIONS, WARRANTIES, OR CERTIFICATIONS WHATSOEVER REGARDING THE PERFORMANCE OR RELIABILITY OF ANY SECURITY OR SIGNALING-RELATED FUNCTIONS OF THIS PRODUCT.

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All rights reserved.

Trademarks

All hardware and software product names used in this document are likely to be registered trademarks and must be treated accordingly.

NOTICE!

This user guide has been compiled with great care and the information it contains has been thoroughly verified. The text was complete and correct at the time of printing. The ongoing development of the products may mean that the content of the user guide can change without notice. Bosch Security Systems accepts no liability for damage resulting directly or indirectly from faults, incompleteness or discrepancies between the user guide and the product described.

1.4 Customer Support and Service

If this unit needs service, contact the nearest Bosch Security Systems Service Center for authorization to return and shipping instructions.

Service Centers

USA

Repair Center

Telephone: 800-566-2283

Fax: 800-366-1329

E-mail: repair@us.bosch.com

Customer Service

Telephone: 888-289-0096

Fax: 585-223-9180

E-mail: security.sales@us.bosch.com

Technical Support

Telephone: 800-326-1450

Fax: 585-223-3508 or 717-735-6560

E-mail: technical.support@us.bosch.com

Canada

Telephone: 514-738-2434

Fax: 514-738-8480

Europe, Middle East, Africa Region

Repair Center

Telephone: 31 (0) 76-5721500

Fax: 31 (0) 76-5721413

E-mail: RMADesk.STService@nl.bosch.com

Asia Region

Repair Center

Telephone: 65 63522776

Fax: 65 63521776

E-mail: rmahelpdesk@sg.bosch.com

Warranty and additional information

For additional information and warranty queries, please contact your Bosch Security Systems representative or visit our website at www.boschsecurity.com.

2 Unpacking

This equipment should be unpacked and handled with care. If an item appears to have been damaged in shipment, notify the shipper immediately. Verify that all the parts listed in the Parts List are included. If any items are missing, notify your Bosch Security Systems Sales or Customer Service Representative. The original packing carton is the safest container in which to transport the unit and must be used if returning the unit for service. Save it for possible future use.

2.1 Parts List

The AutoDome Junior HD includes the following components:

- One (1) PTZ or Fixed Dome camera
- One (1) 4-wire alarm in/out cable
- One (1) 2-wire camera power cable, red and black wires
- One (1) mounting plate
- One (1) outdoor installation kit
(for optional VJR-A3-IC54 mounting kit)
- One (1) user manual

2.2 Safety Rules

To ensure safety, the following warnings are specified:

- The device must be installed and maintained by skilled technical personnel.
- Connect the device to a power source corresponding to the indications given on the marking label.
- Use only the attachments/accessories specified by the manufacturer.
- Unplug the device during lightning storms or when unused for long periods of time.
- Do not use the device near water (indoor models only).
- Do not use the device in the presence of flammable substances.
- Do not allow children or unauthorized personnel to use the device.
- Do not block any ventilation openings.
- Keep this manual for future reference.

3 Description

The AutoDome Junior is part of a larger building block for any surveillance/security system. By using multiple keyboard controllers and multiple dome cameras, no place is too large for monitoring. Extensible and flexible architecture facilities remote control functions for a variety of external switching devices such as multiplexers and DVRs (see the figure below).

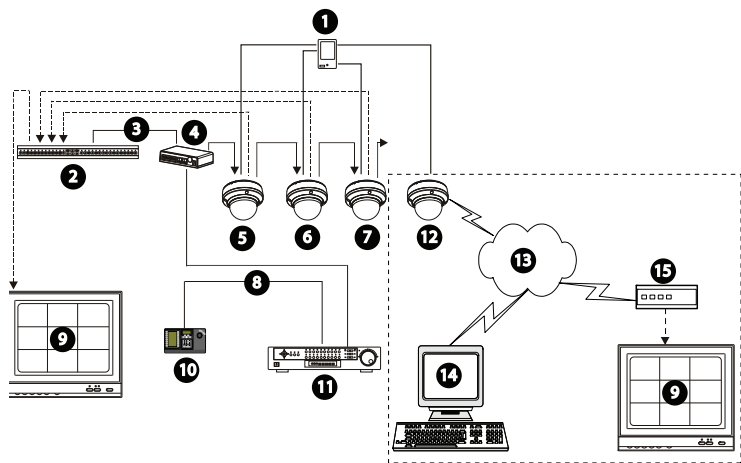


Figure 3.1 System Configuration

1	Alarm Input (sensor)	12	AutoDome Junior IP or HD
2	Multiplexer	13	Network
3	RS-485 Cable	14	Computer
4	Junction Box	15	Encoder/Decoder
5	AutoDome Junior		
6	AutoDome Junior		
7	AutoDome Junior		
8	RS-485 Cable		
9	Monitor		
10	Keyboard		
11	DVR		

Refer to *Section 11 Using the IP Interface, page 59* for software and infrastructure requirements for an AutoDome Junior IP or HD installation.

This installation should be made by qualified service personnel and conform to the National Electrical Code and applicable local codes.

**NOTICE!**

A grounded conduit is required in order to meet the EMC Regulation Requirements.

4 Installing a Surface Mount

4.1 Description

This chapter details how to mount the AutoDome Junior to a hard surface. The AutoDome Junior is also suitable for wall (*Section 5 Installing a Wall Mount, page 27*), recess (*Section 6 Installing a Recessed Mount, page 34*), and pipe mounting (*Section 7 Installing a Pipe Mount, page 43*). For specific directions on mounting the unit, see the manual that came with your mount.

NOTICE!

The image sensors in modern cameras are highly sensitive and require special care for proper performance and extended lifetime. Follow the guidelines for optimum results with your camera:



- Do not expose to direct sunlight or bright spotlights in operating and nonoperating conditions.
- Avoid bright lights in the field of view of the camera. Bright lights cause a “smearing” effect, which is visible as white lines above and below the highlight. Prolonged exposure to bright lights may cause bleaching of the sensor's color filters. This will be visible as colored spots in the picture and is irreversible.

4.1.1 Additional Tools Required

- Appropriate straight slot screwdrivers
- No. 2 Phillips screwdriver
- Appropriate tool for cutting a hole in drywall or ceiling tile (if applicable)
- 4 in. x 4 in. Junction box with 90 mm (3.54 in.) mount holes (indoor installation)
- One (1) ground
- T-10 Torx wrench

4.1.2 Preparing the Surface Mount for an Indoor Installation

The following instructions detail the preparation necessary to prepare the surface and the steps to install a Surface Mount.

1. Determine a secure location for the surface mount dome.

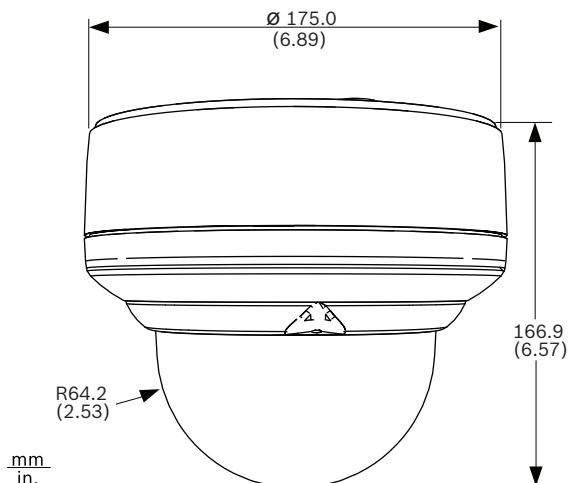


Figure 4.1 Indoor Surface Mount Dimensions

2. Install a 4 in. gang box or square metal junction box (not supplied). Ensure junction box and mounting screws are capable of supporting a maximum load of 11.33 kg (25 pounds).

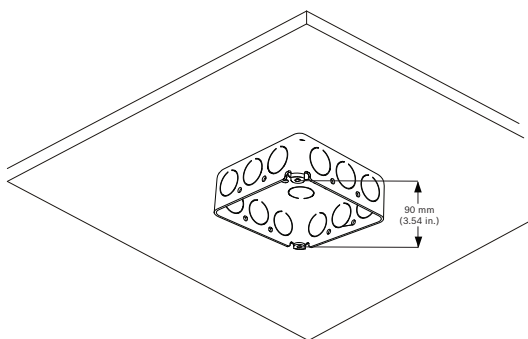


Figure 4.2 Install User-supplied Junction Box

- Secure the mounting plate to the junction box with the user supplied hardware (see *Figure 4.3*).

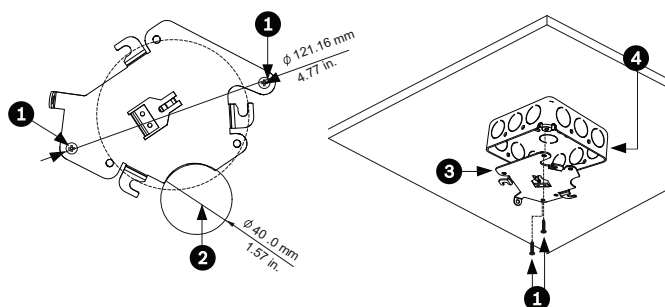


Figure 4.3 Install the Mounting Plate

1	Junction Box Holes
2	Cable Hole (40 mm maximum); Crescent Shape
3	Mounting Plate
4	Junction Box

- Skip to *Section 4.1.3 Installing the Camera to the Mounting Plate*, page 23, to continue the installation.

4.1.3 Installing the Camera to the Mounting Plate

To install the camera to the mounting plate for a surface or suspended ceiling, do the following:

- Route wires on side of mounting plate with crescent shaped cut-out (Ref. #2 *Figure 4.3*).
- Attach grounding wire from unit to junction box.
- Attach user supplied ground to junction box.
- Connect the mating connectors with the flying leads to the user supplied wiring (see *Section 8 Preparing the Wiring*, page 50 for wiring information).

- 5. Unlock the single safety locking screw on the base of the unit using the user-supplied Allen wrench.

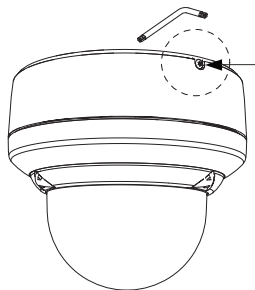


Figure 4.4 Unlock Safety Locking Screw

- 6. Plug the matching connectors from the camera into the mating connectors from the ceiling.

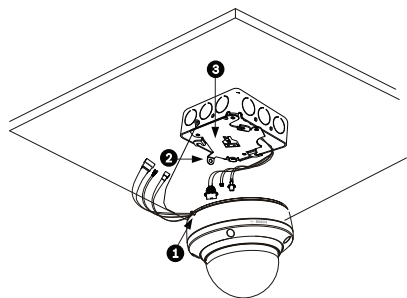


Figure 4.5 Connect Cables

1	Locking Screw
2	Vertical Tab
3	Mounting Plate

- 7. Align wires on side of mounting plate with crescent shaped cut-out.

8. Attach the camera to the mounting plate by inserting the vertical tab on the plate (item 1, below) into the recessed slot on the top of the camera dome (Item 3) to the right of the safety locking screw (item 2).

Note: Do not loosen the three brass buttons (item 4). These brass buttons engage the slotted tabs (item 5) on the mounting plate.

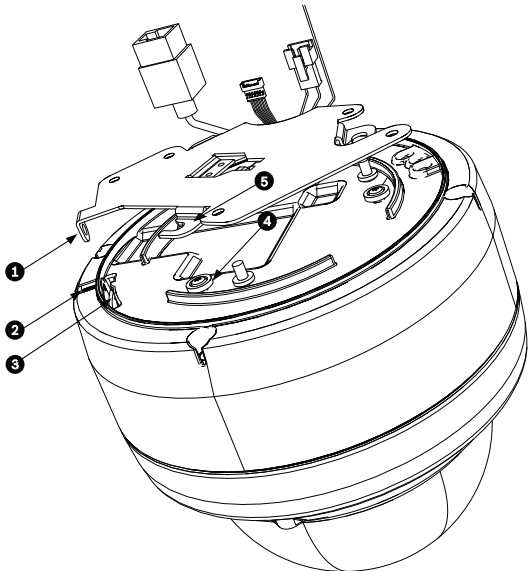


Figure 4.6 Tab/Slot Alignment Detail

1	Vertical Tab (on mounting plate)
2	Locking Screw
3	Recessed Slot (on dome housing)
4	Brass Button (total of three on housing)
5	Slotted Tab (total of three on mounting plate)

9. Rotate the camera approximately 15 degrees in a clockwise direction to lock firmly into place, as shown in the next illustration.

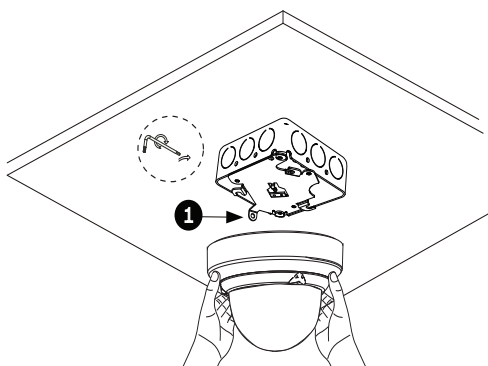


Figure 4.7 Attach Dome to Mounting Plate

1	Vertical tab
---	--------------

10. Secure the safety locking screw with the user supplied locking torx wrench (T-10).

5 Installing a Wall Mount

5.1 Description

This chapter details how to mount the AutoDome Junior to a wall. The AutoDome Junior is also suitable for surface (Section 4 *Installing a Surface Mount*, page 21), recess (Section 6 *Installing a Recessed Mount*, page 34), and pipe mounting (Section 7 *Installing a Pipe Mount*, page 43). For specific directions on mounting the unit, see the manual that came with your mount.

NOTICE!

The image sensors in modern cameras are highly sensitive and require special care for proper performance and extended lifetime. Follow the guidelines for optimum results with your camera:



- Do not expose to direct sunlight or bright spotlights in operating and nonoperating conditions.
- Avoid bright lights in the field of view of the camera. Bright lights cause a “smearing” effect, which is visible as white lines above and below the highlight. Prolonged exposure to bright lights may cause bleaching of the sensor's color filters. This will be visible as colored spots in the picture and is irreversible.

5.1.1 Additional Tools Required

- Appropriate straight slot screwdrivers
- No. 2 Phillips screwdriver
- Appropriate tool for cutting a hole in drywall or ceiling tile (if applicable)
- T-10 Torx wrench

5.1.2 Preparing the Wall Mount for an Indoor Installation

Use the following instructions to mount to an indoor wall.

1. Determine a secure location for the wall mount (supplied separately).

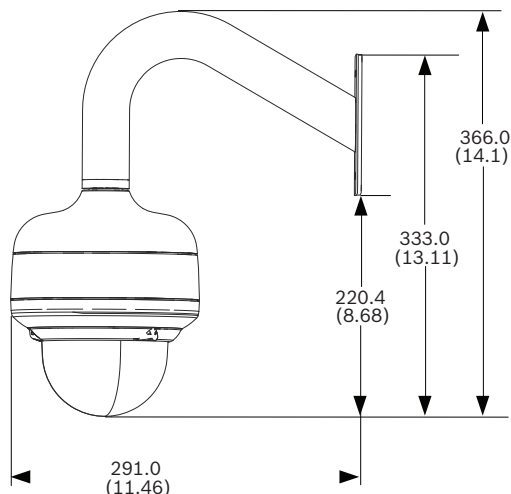


Figure 5.1 Wall Mount Dimensions

2. Fit a user-provided metal single-gang junction box to the wall.
3. Attach a grounded metal conduit to the junction box clamp.

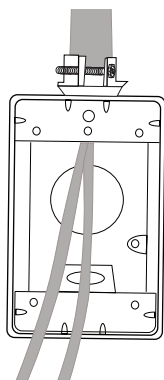


Figure 5.2 Metal Conduit

4. Feed the wires through the conduit.
5. Feed all wires from the metal junction box through the arm.
6. Attach the mounting cap to the arm.
7. Fit the arm to a metal single-gang junction box.

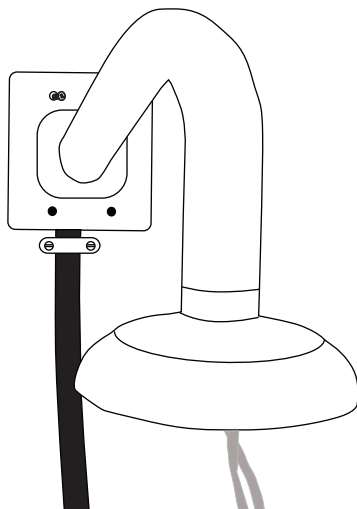


Figure 5.3 Fit to Gang Junction Box

8. Secure with the appropriate user-provided SEMS screws that have an integral lock washer to dig through the paint and ensure an electrical ground connection to the arm housing or ground lug.



NOTICE!

The metal junction box and mounting surface must be capable of supporting a maximum load of 11.33 kg (25 pounds).

9. Skip to *Section 5.1.3 Installing the Camera to the Mounting Plate*, page 30, to continue the installation.

5.1.3 Installing the Camera to the Mounting Plate

To install the camera to the mounting plate, do the following:

- 1. Attach the mounting plate (supplied with dome) to the dome mounting cap with the three (3) screws supplied.

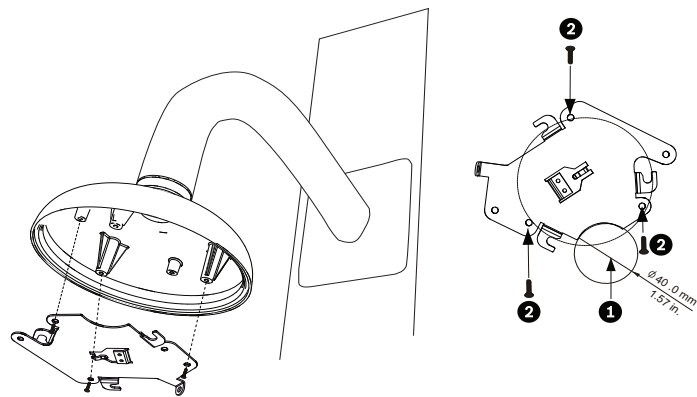


Figure 5.4 Attach Mounting Plate to Dome Cap

1	Cable Hole (40 mm maximum; crescent shape)
2	Mounting Screws for Dome Cap

- 2. Route wires on side of mounting plate with crescent shaped cut-out (Ref. #2 Figure 5.4).
- 3. Attach grounding wire from unit to the mounting cap.
- 4. Attach user supplied ground to junction box.
- 5. Connect the mating connectors with the flying leads to the user supplied wiring (see the *Section 8 Preparing the Wiring*, page 50 for wiring information).

6. Unlock the single safety locking screw on the base of the unit using the user-supplied Allen wrench.

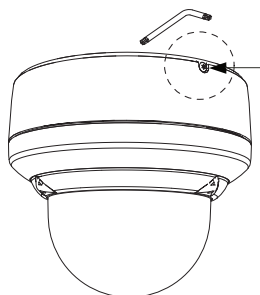


Figure 5.5 Unlock Safety Locking Screw

7. Plug the matching connectors from the camera into the mating connectors from the ceiling.

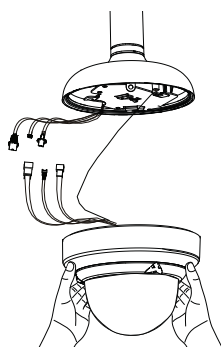


Figure 5.6 Connect Cables

8. Align wires on side of mounting plate with crescent shaped cut-out.
9. Attach the camera to the mounting plate by inserting the vertical tab on the plate (item 1, below) into the recessed slot on the top of the camera dome (Item 3) to the right of the safety locking screw (item 2).

Note: Do not loosen the three brass buttons (item 4). These brass buttons engage the slotted tabs (item 5) on the mounting plate.

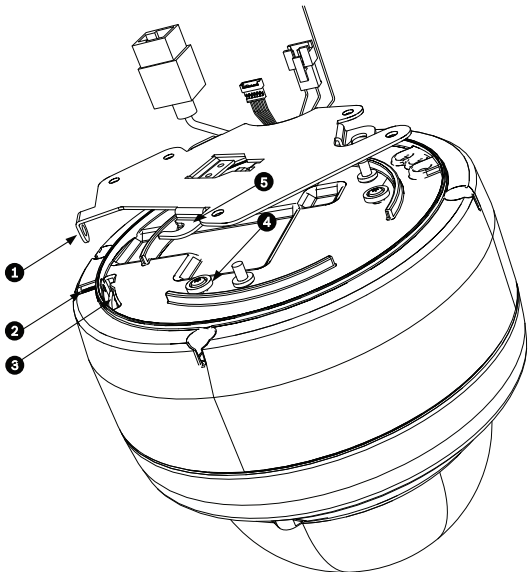


Figure 5.7 Tab/Slot Alignment Detail

1	Vertical Tab (on mounting plate)
2	Locking Screw
3	Recessed Slot (on dome housing)
4	Brass Button (total of three on housing)
5	Slotted Tab (total of three on mounting plate)

10. Rotate the camera approximately 15 degrees in a clockwise direction to lock firmly into place, as shown in the next illustration. Note: Do not loosen brass mounting buttons.

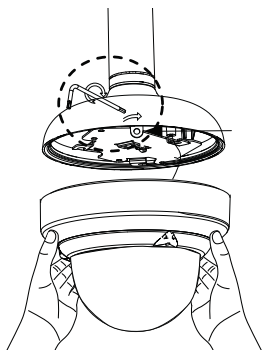


Figure 5.8 Attach Dome to Mounting Plate

11. Secure the safety locking screw with the user supplied locking torx wrench (T-10).
12. Pull excess wire back into the mount tube.
13. Confirm that the housing is electrically grounded.

6 Installing a Recessed Mount

6.1 Description

This chapter details how to recess mount the AutoDome Junior. The AutoDome Junior is also suitable for surface (*Section 4 Installing a Surface Mount, page 21*), wall (*Section 5 Installing a Wall Mount, page 27*), and pipe mounting (*Section 7 Installing a Pipe Mount, page 43*). For specific directions on mounting the unit, see the manual that came with your mount.

NOTICE!

The image sensors in modern cameras are highly sensitive and require special care for proper performance and extended lifetime. Follow the guidelines for optimum results with your camera:



- Do not expose to direct sunlight or bright spotlights in operating and nonoperating conditions.
- Avoid bright lights in the field of view of the camera. Bright lights cause a “smearing” effect, which is visible as white lines above and below the highlight. Prolonged exposure to bright lights may cause bleaching of the sensor's color filters. This will be visible as colored spots in the picture and is irreversible.

6.1.1 Additional Requirements

- Appropriate straight slot screwdrivers
- No. 2 Phillips screwdriver
- Appropriate tool for cutting a hole in drywall or ceiling tile (if applicable)
- 4 in. x 4 in. junction box (optional)
- T-10 Torx wrench
- VJR-A3-SP, support kit for VJR-A3-IC mounting kit

6.1.2 Preparing the Ceiling for Installation

To mount to a recess mount, do the following:

1. Determine a secure location for the recessed mount (supplied separately).

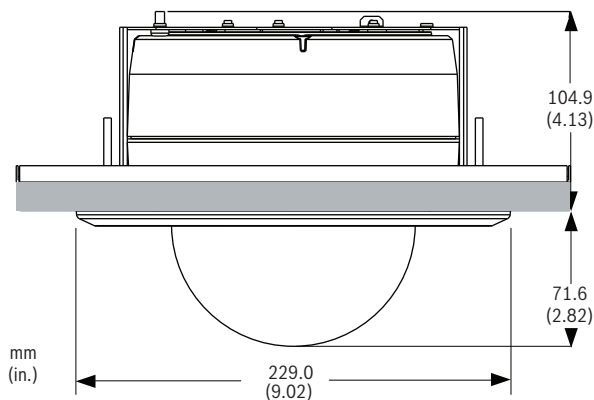
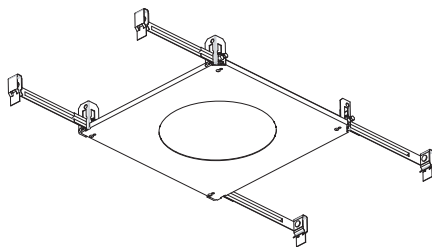


Figure 6.1 Recess Mount Dimensions

2. Drill or cut a 200 mm hole with a tolerance of 2.2 mm (7.9 in. $\pm 1/8$).
3. Optional: if installing the AutoDome Junior HD to a suspended ceiling tile or any other surface where additional support is required, the VJR-A3-SP mounting kit is recommended (supplied separately).



- 4. Align holes of mounting plate (supplied with dome) with mounting bracket and attach with screws. Ensure that both the crescent shape of the mounting plate and the crescent shape of the mounting bracket are aligned.

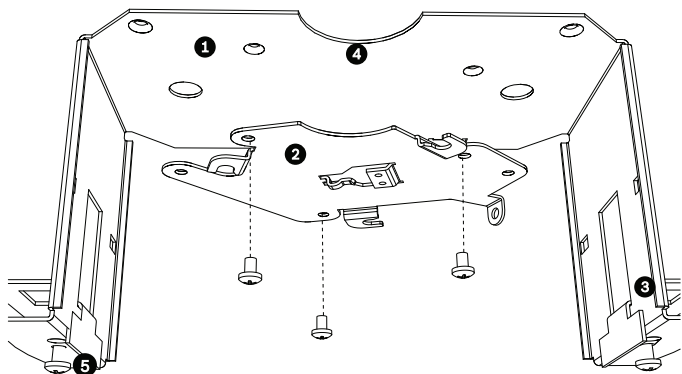


Figure 6.2 Attach Mounting Plate to Mounting Bracket

1	Mounting Bracket
2	Mounting Plate
3	Clamping Plate
4	Crescent Shape
5	Clamp Drive Screw

- 5. Loosen the two clamp drive screws (item 5, above) so that the clamping plates move freely.
- 6. Insert mount through the hole in the ceiling. Slide clamps out and down so that the ceiling/drywall is captured in between the clamps and the bracket flange. The ceiling/ drywall must have a maximum thickness of 41.7 mm (1.64 in.) and an minimum thickness of 12.7 mm (0.50 in.).

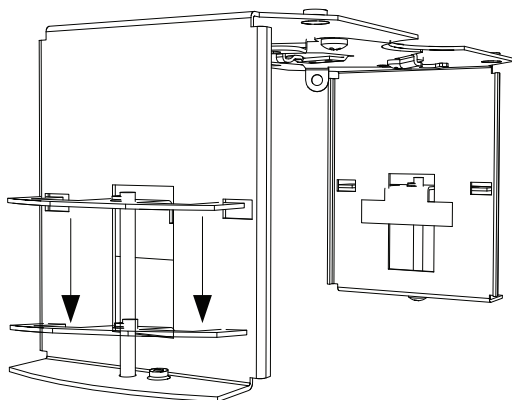


Figure 6.3 Attach Recess Mount to Ceiling

7. Tighten both clamps using the clamp drive screws (installed on the assembly) and a #2 Phillips screwdriver.

NOTICE!



Over-torquing the ceiling clamps can damage the clamp or ceiling. Only tighten the clamp until it contacts the ceiling and you start to feel some resistance. If using a power screwdriver, set the torque level to the lowest setting.

NOTICE!



If you need to install the VJR-A3-SP Support Bracket, refer to the guide included with the bracket. Once the bracket is installed, continue with the next section.

6.1.3 Installing the Camera to the Mounting Plate

To install the base to a surface or suspended ceiling using the supplied mounting plate, do the following:

1. Loosen the single safety locking screw on the base of the unit using the user-supplied T-10 Torx wrench.

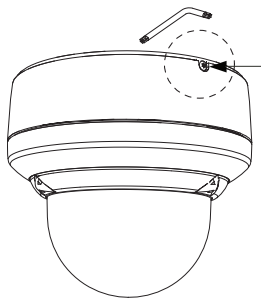


Figure 6.4 Unlock Safety Locking Screw



CAUTION!

All wires for installation applications must be routed through a grounded conduit.

2. Remove the screw from the Earth ground ($\oplus$) on the top of the mounting bracket.
3. Attach a user-supplied ground wire to the Earth ground ($\oplus$) screw hole on the mounting bracket and secure with the screw.
4. Attach the green grounding wire from the unit to the grounded ($\perp$) screw hole on the mounting bracket using the attached captive screw washer.
5. Route wires on the side of mounting plate with the crescent shaped cut-out.
6. Connect the mating connectors (supplied in the accessory kit) with the flying leads to the user supplied wiring (see the *Section 8 Preparing the Wiring, page 50* for wiring information).

- 7. Plug the matching connectors from the camera into the mating connectors from the ceiling.

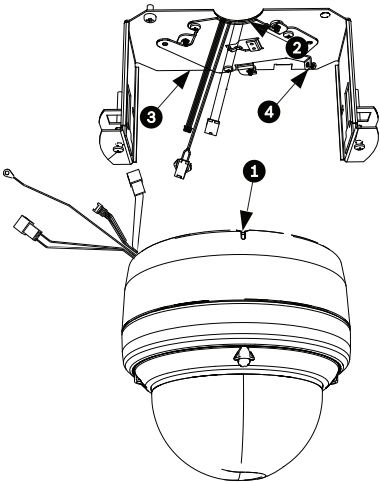


Figure 6.5 Match Connectors

1	Locking Screw
2	Crescent Shape
3	Mounting Plate
4	Vertical Tab

- 8. Attach the camera to the mounting plate by inserting the vertical tab on the plate (item 1, below) into the recessed slot on the top of the camera dome (Item 3) to the right of the safety locking screw (item 2).

Note: Do not loosen the three brass buttons (item 4). These brass buttons engage the slotted tabs (item 5) on the mounting plate.

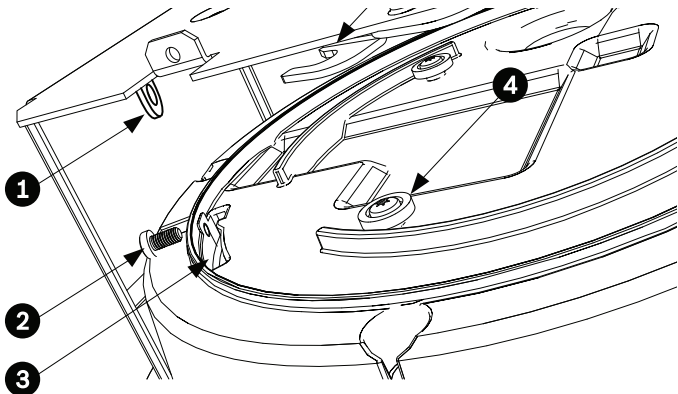


Figure 6.6 Tab/Slot Alignment Detail

1	Vertical Tab (on mounting plate)
2	Locking Screw
3	Recessed Slot (on dome housing)
4	Brass Button (total of three on housing)
5	Slotted Tab (total of three on mounting plate)

9. Rotate the camera approximately 15 degrees in the clockwise direction. Then, lock firmly into place, as shown in the next illustration.

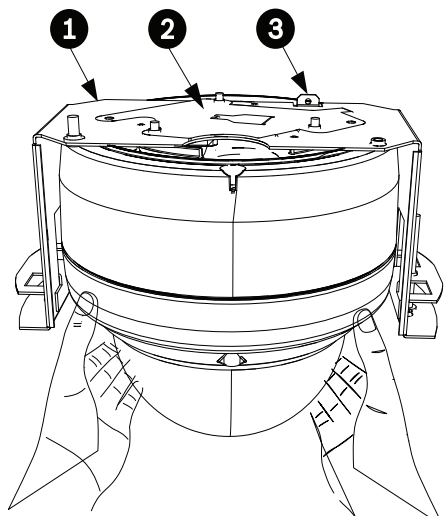


Figure 6.7 Attach Dome to Mounting Plate

1	Recess Mounting Bracket
2	Mounting Plate
3	Mounting Bracket Tether Point

10. Ensure unit is centered.



NOTICE! The recessed mounting bracket is provided with an additional safety tether point. To prevent injury, attach a safety wire from a secure anchor point above the ceiling to this tether point.

11. Align trim ring so the four alignment posts (item 1, below) align with the recesses in the camera housing (item 2) and so the two safety screws align with the off center holes (item 3) on the locking clamps.

Note: The two (2) sets of raised stand-off tabs (item 4) on each side of the trim ring align with the locking clamps.

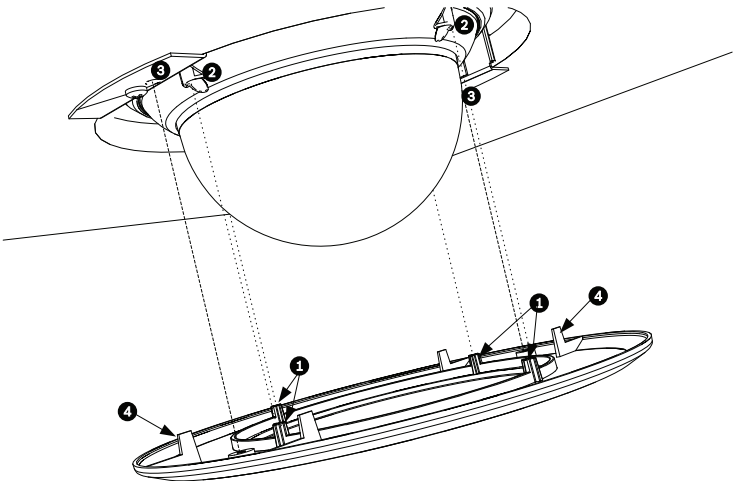


Figure 6.8 Align Trim Ring

1	Alignment Tabs (four)
2	Align tabs to the recessed areas on the housing
3	Align safety locking screws to these connections
4	Stand-off Tabs (two)

- 12. Snap trim ring into place. Ensure snaps are secure by attempting to lightly turn unit. Note: Unit should not turn.
- 13. Use the supplied T-10 Torx wrench to secure the trim ring's two (2) safety locking screws to the mounting bracket.

7 Installing a Pipe Mount

7.1 Description

This chapter details how to mount the AutoDome Junior to a pipe. The AutoDome Junior is also suitable for surface (*Section 4 Installing a Surface Mount, page 21*), wall (*Section 5 Installing a Wall Mount, page 27*), and recess mounting (*Section 6 Installing a Recessed Mount, page 34*). For specific directions on mounting the unit, see the manual that came with your mount.

NOTICE!

The image sensors in modern cameras are highly sensitive and require special care for proper performance and extended lifetime. Follow the guidelines for optimum results with your camera:



- Do not expose to direct sunlight or bright spotlights in operating and nonoperating conditions.
- Avoid bright lights in the field of view of the camera. Bright lights cause a “smearing” effect, which is visible as white lines above and below the highlight. Prolonged exposure to bright lights may cause bleaching of the sensor's color filters. This will be visible as colored spots in the picture and is irreversible.

7.1.1 Tools/Supplies Required

- Appropriate straight slot screwdrivers
- No. 2 Phillips screwdriver
- Appropriate tool for cutting a hole in drywall or ceiling tile (if applicable)
- T-10 Torx wrench

7.1.2 Preparing the Ceiling for Installation

The following instructions detail the preparation necessary to prepare the surface and the steps to install a pipe mount.

1. Determine a secure hard surface location for the ceiling pipe mount (supplied separately).

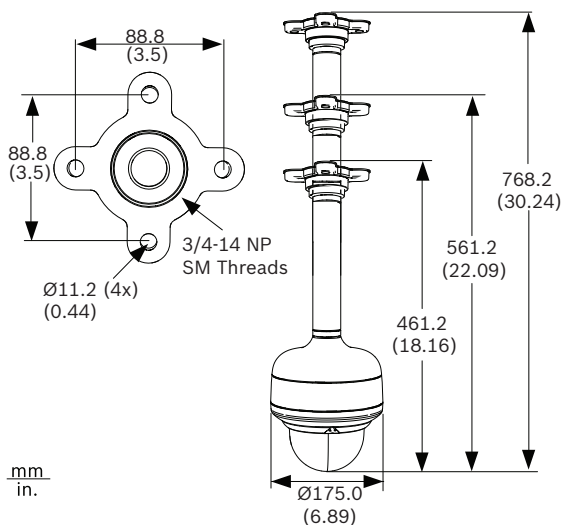


Figure 7.1 Pipe Mount Dimensions

2. Use the four (4) holes in the flange as a template to mark the position where the holes should be drilled to secure the mount.

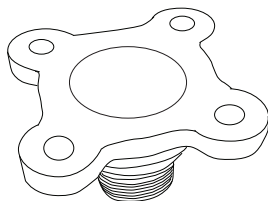


Figure 7.2 Mark Flange Holes

3. Drill the four (4) holes in the installation location, screws not supplied, use a minimum screw length of 10 mm (.39 in.).

**CAUTION!**

All wires for installation applications must be routed through a grounded conduit.

4. Drill a fifth hole (maximum of 20 mm [.79 in.]) in the center of the four-hole pattern used to mount the flange. Use this hole to feed the wires through the mount.

**NOTICE!**

The fasteners and mounting surface must be capable of supporting a maximum load of 11.33 kg (25 pounds).

5. Pull the wires from the pipe, starting at the flange end.

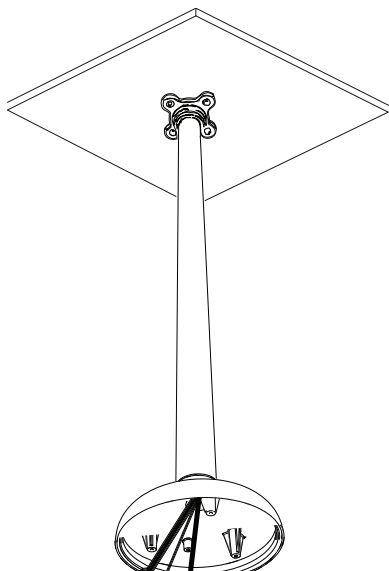


Figure 7.3 Attach Pendant Pipe Mount to Ceiling

**CAUTION!**

Select a rigid mounting location to prevent excessive vibration to the AutoDome Junior Camera.

- 6. Attach user supplied ground lug.
- 7. Align holes of mounting plate (supplied with dome) with dome mounting cap and attach with the three (3) screws supplied (Figure 1.9).

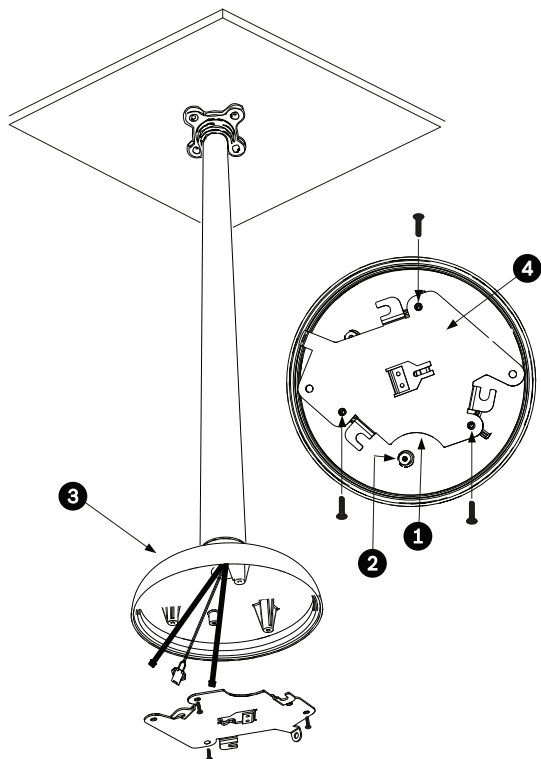


Figure 7.4 Attach Mounting Plate to Dome Cap

1	Crescent Shape
2	Ground Lug
3	Dome Cap
4	Mounting Plate

7.1.3 Installing the Camera to the Mounting Plate

To install the camera to a ceiling mount using the supplied mounting plate, do the following:

1. Route wires on side of mounting plate with crescent shaped cut-out.
2. Attach grounding wire from unit to mounting cap.
3. Attach user supplied ground to junction box.
4. Connect the mating connectors with the flying leads to the user supplied wiring (see the *Section 8 Preparing the Wiring, page 50* for wiring information).
5. Unlock the single safety locking screw on the base of the unit using the user-supplied Allen wrench.

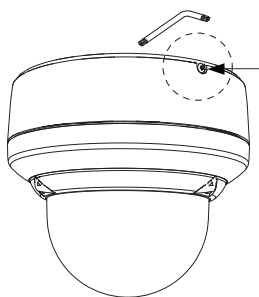


Figure 7.5 Unlock Safety Locking Screw

6. Plug the matching connectors from the camera into the mating connectors from the ceiling.
7. Align wires on side of mounting plate with crescent shaped cut-out.

8. Attach the camera to the mounting plate by inserting the vertical tab on the plate (item 1, below) into the recessed slot on the top of the camera dome (Item 3) to the right of the safety locking screw (item 2).

Note: Do not loosen brass mounting buttons.

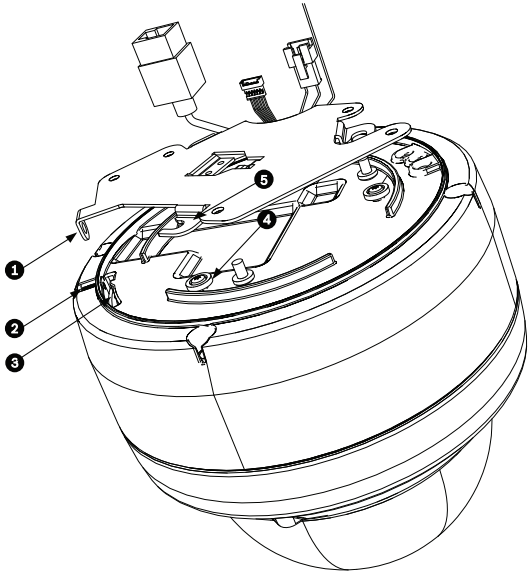


Figure 7.6 Tab/Slot Alignment Detail

1	Vertical Tab (on mounting plate)
2	Locking Screw
3	Recessed Slot (on dome housing)
4	Brass Button (total of three on housing)
5	Slotted Tab (total of three on mounting plate)

9. Rotate the camera approximately 15 degrees in the clockwise direction and lock firmly into place, as shown in the next illustration.

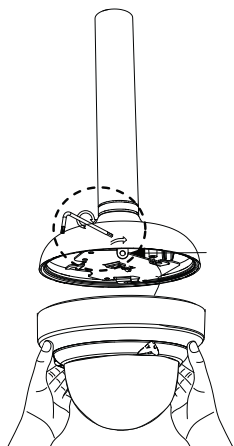


Figure 7.7 Attach Dome to Mounting Plate

10. Secure the safety locking screw with the user supplied locking torx wrench (T-10).
11. Pull excess wire back into the mount tube.
12. Confirm that the housing is electrically grounded.

8 Preparing the Wiring

The AutoDome Junior HD contains three cables: an Ethernet cable, a 24 VAC power input cable, and an alarm input/output cable. The Ethernet connection carries control and video information and can deliver power to the camera via the Power-over-Ethernet+ (PoE+) standard. Refer to *Section 9 Audio, Alarms and Relay Connections, page 53*, for alarm connection information.



CAUTION!

Installation should only be performed by qualified service personnel in accordance with the National Electrical Code or applicable local codes.



CAUTION!

All wires for installation applications must be routed through a grounded conduit.

8.1 Power

The recommended power cable is a 2-conductor, 14-18 gage cable, depending on the distance.

	Watts	14 AWG (2.5 mm)	16 AWG (1.5 mm)	18 AWG (1.0 mm)
Camera, Indoor models				
24 VAC to AutoDome Junior HD	17	670 ft (204 m)	421 ft (128 m)	265 ft (81 m)

Table 8.1 Max. Wire Distance from Power Supply to AutoDome Junior HD

8.2 Connecting the Power

The AutoDome Junior HD is available as an indoor model only. Power to the camera in all indoor models is supplied either via a single 24 VAC isolated power connector or via a Power over Ethernet + (PoE+, IEEE 802.3at, class 4) connection using the existing CAT 5E Ethernet cable.

WARNING!



The indoor AutoDome Junior IP or HD camera models can accept power from the 24 VAC power input or from the Ethernet input. Ensure that the camera receives power from only one source.

Refer to *Section 8.3 Ethernet Connection (IP models)*, page 52, for more information about connecting Power over Ethernet.

NOTICE!



Use certified / Listed Class 2 power supply transformer only.

8.2.1 Power Connections to Indoor Cameras

WARNING!



The indoor AutoDome Junior IP or HD models can accept power from the 24 VAC power input or from the Ethernet input. Ensure that the camera receives power from only one source. Refer to *Section 8.3 Ethernet Connection (IP models)*, page 52, for more information about connecting Power over Ethernet.

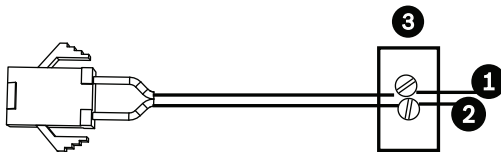


Figure 8.1 Power Cable

Ref. #	Wire	Color
1	24 VAC	Red
2	24 VAC	Black
3	User-supplied Power Supply	n/a

NOTICE!



The camera unit accepts 24 VAC, 1.2 A power only. Do not connect 120 V or 230 V to this camera.

To connect the power to indoor models:

1. Locate the cable assembly with a three (3) pin mating connector on one end and the red and black flying leads on the other end.
2. Connect one lead of the 24 VAC power source to the black wire.
3. Connect the other lead of the 24 VAC power source to the red wire.
4. Connect the green earth ground cable to a suitable grounded conduit.

8.3 Ethernet Connection (IP models)

The AutoDome Junior HD connects to a 10 Base-T/100 Base-TX network either directly or via a switch. Both video and control are transmitted over a standard TCP/IP network using the built-in Web server. In addition, power is supplied to indoor HD IP camera via the Ethernet cable compliant with the Power-over-Ethernet + (IEEE 802.3at, class 4) standard.



CAUTION!

Ethernet connections must be made to non-exposed (indoor) networks only.

Cable Type	CAT-5E or CAT 6 Ethernet
Maximum Distance	100 m (328 ft)
Bandwidth	10 Base-T/100 Base-TX
PoE+ (indoor models only)	IEEE 802.3at, class 4 standard
Terminal Connector	RJ45, Female

9

Audio, Alarms and Relay Connections

9.1 Alarm Input

All AutoDome Junior models provide connections for two alarm inputs, one alarm output, and one audio input. Each alarm input can be activated by dry contact devices such as pressure pads, passive infrared detectors, door contacts, and similar devices.

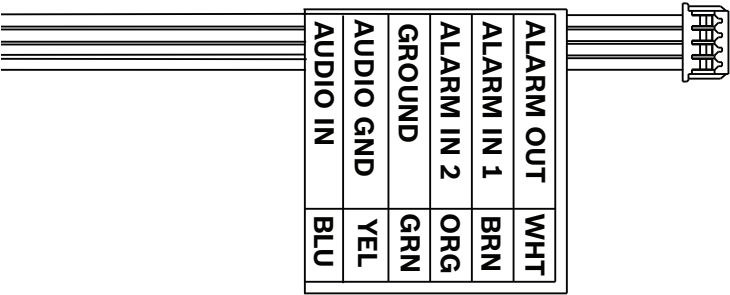


Figure 9.1 Six-wire Audio and Alarm In/Out Cable

Wire Color	Function
White	Alarm Out
Brown	Alarm In 1
Orange	Alarm In 2
Green	Ground
Yellow	Audio Epms I b
Blue	Audio GI

The table below summarizes the size and distance wires.

Wire Size		Maximum Distance	
AWG	mm	feet	meters
22	0.644	500	152.4
18	1.024	800	243.8

Table 9.1 Alarm Wire Guide

You wire alarms either Normally Open (N.O.) or Normally Closed (N.C.), and must program the alarm inputs N.O. (the default) or N.C. through the AutoDome Junior main menu.

9.2 Connecting Alarms (inputs 1 through 2)

You can configure alarms 1 through 2 as Normally Open (N.O.) or Normally Closed (N.C.) alarms.

9.2.1 Connecting a Normally Open Alarm

1. Connect the alarm to the appropriate input (1 through 2) and ground at the AutoDome Junior.



Figure 9.2 N.O. - Normally Open

Ref. #	User Contact	Dome	Color
1	Normally Open	Alarm In 1 or Alarm In 2 (Ref. #3)	Brown IN 1 or Orange IN 2
2	Common	Ground (Ref. #4)	Green

2. From the AutoDome Junior HD Settings page select Interface>Alarm Inputs. Refer to *Section 12 Configuring the AutoDome Junior HD*, page 79, for directions about accessing the Settings page.

AutoDome Junior Programmed N.O.	
Circuit	Alarm Indication
Open	Normal
Closed	Alarm

9.2.2 Connecting a Normally Closed Alarm

1. Connect the alarm to the appropriate input (1 through 2) and ground at the AutoDome Junior.



Figure 9.3 N.C. Normally Closed Connections

Ref. #	User Contact	Dome	Color
1	Normally Closed	Alarm In 1 or Alarm In 2 (Ref. #3)	Brown IN 1 or Orange IN 2
2	Common	Ground (Ref. #4)	Green

2. From the AutoDome Junior HD Settings page select Interface>Alarm Inputs. Refer to *Section 12 Configuring the AutoDome Junior HD*, page 79, for directions about accessing the Settings page.

AutoDome Junior Programmed N.C.	
Circuit	Alarm Indication
Open	Alarm
Closed	Normal

9.3 Alarm Outputs

The AutoDome Junior incorporates one (1) alarm output: an open collector output.

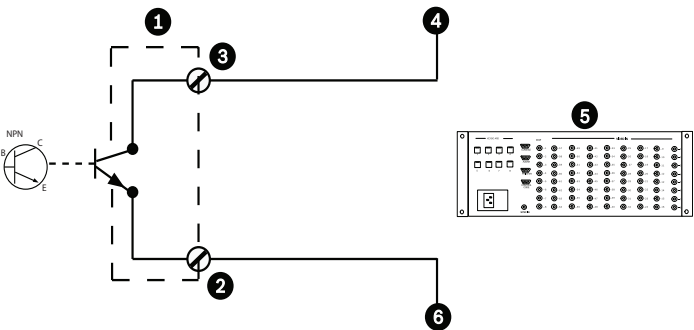


Figure 9.4 N.O. - Normally Open

Ref. #	Description	Color
1	Dome	n/a
2	Normally Open	White
3	Ground	Green
4	Alarm In	n/a
5	User Supplied Device (i.e. Allegiant or DVR)	n/a
6	Ground/Common	n/a

9.3.1 Connecting an Open Collector Output

Output 1 is an open collector. This output must be connected to a positive voltage between 5 and 32 V to complete the circuit, with a maximum voltage rating of 32 VDC @ 150 ma.

1. Connect the appropriate stripped wire to the open collector of the transistor's white wire.
2. Connect the appropriate stripped wire to the ground (GND) connector.

9.4 Audio Cables

The AutoDome Junior is capable of receiving line input audio signals and transmitting it over a network. The audio signal is transmitted one-way and in sync with the video signal.

Refer to *Section 12.5 Basic Mode: Audio*, page 85.

Audio Line Input Specifications

Max. Input Voltage	5.5 Vpp
Impedance	9 K Ω
Sample Rate	G.711: 8 bits @ 8 KHzL16: 16 bits @ 16 kHz PCM
Shield	Bare copper braid: 95% coverage
Internal gain level adjustment is available	

Wire Specifications

Wire Type	Coax ³ (recommended)
Distance	10 m (33 ft)
Gage	22 AWG
Shield	Bare copper braid: 95% coverage
Center conductor	Stranded bare copper

10 Getting Started

Once the installation is complete, the AutoDome Junior can be programmed. A typical system may include a keyboard, matrix switcher, monitor, appropriate wiring connections, and a PC with Internet Explorer. Please refer to the individual product manuals for complete installation and setup instructions for each of the system components.

10.1 Powering On

When you turn the AutoDome Junior power on there is a ten (10) second pause before the dome starts its homing phase. During the homing phase the camera pans left and right and tilts up and down. It also adjusts the lens focus. The entire homing phase lasts approximately 20 seconds and ends with a splash screen.

If you are using an AutoDome Junior IP or HD model, refer to *Section 11 Using the IP Interface, page 59*.



WARNING!

Before powering the dome on, remove the clear protective plastic sheet on top of the bubble.

11 Using the IP Interface

The AutoDome Junior IP and HD transmits PTZ control commands and images over a TCP/IP network. It also allows users to configure the camera display settings, camera operating settings, and to configure the network parameters.

NOTICE!



- This chapter uses the term “AutoDome Junior IP” to refer to both the AutoDome Easy II IP and the AutoDome Junior HD cameras.
- Some features and procedures described pertain only to the AutoDome Junior HD PTZ (VJR-8xx) cameras.

The IP unit incorporates a network video server in the IP module. The primary function of the server is to encode video and control data for transmission over a TCP/IP network. With its H.264 encoding, it is ideally suited for IP communication and for remote access to digital video recorders and multiplexers. The use of existing networks means that integration with CCTV systems or local networks can be achieved quickly and easily. Video images from a single camera can be simultaneously received on several receivers.

Refer to *Section 16 BVIP Firmware Updates, page 91*, for firmware upgrade instructions.

11.1 Overview of Features

The AutoDome Junior HD module includes the following functionality:

Function	Description
Video Encoding	The camera uses the H.264 compression standards and ensures that the data rate remains low even with high image quality and can also be adapted to local conditions within wide limits.
Streaming	Encodes multiple data streams simultaneously according to individually customized profiles. This feature creates data streams that can serve different purposes. For example, one (1) data stream for local recording and one (1) data stream optimized for transmission over the Local Area Network (LAN).
Multicast	Enables simultaneous, real-time transmission to multiple receivers. The network must implement the UDP and IGMP V2 protocols as a prerequisite for Multicasting.
Configuration	Allows configuration for all camera settings from a Web browser on the local network (Intranet) or on the Internet. You can also update the firmware, load device configurations, store configuration settings, and copy these settings from one camera to another.
Snapshots	Allows you to take and store individual video frames as JPEG images from the Web browser interface.
Record	Allows configuration for the recording options of the IP module. You can record video from the Livepage to a hard drive or you can opt to store up to 8 MB of video on the IP module.

11.2 System Requirements

The AutoDome Junior HD requires specific software and hardware to allow a user to view live images and to configure camera settings over a TCP/IP network. These requirements are:

- A computer with the Microsoft Windows XP, Vista, or Windows 7 operating system, network access, and the Microsoft Internet Explorer Web browser version 7.0 or later, or
- A computer with Microsoft Windows XP, Vista, or Windows 7 operating system, network access, and reception software such as the Bosch Video Client, Bosch Video Management System, or a Bosch recording solution, or
- A compatible hardware decoder from Bosch Security Systems as a receiver and a connected video monitor.

NOTICE!



The Web browser must be configured to enable Cookies to be set from the IP address of the unit.

In Windows Vista, deactivate protected mode on the Security tab under Internet Options.

You can find notes on using Microsoft Internet Explorer in the online Help in Internet Explorer.

If you choose to use a computer running Microsoft Internet Explorer or any of the Bosch software, the computer must conform to the following minimum requirements:

- Processor: Quad-core
- RAM: 256 MB
- Video system: 128 MB video memory, 1024 x 768 display with a minimum of 16-bit color
- Network interface: 100-BaseT
- Microsoft Internet Explorer, version 6.0 or higher
- DirectX 9.0c
- MPEG ActiveX utility
- Sun Java Virtual Machine



NOTICE!

Ensure the graphics card is set to 16-bit or 32-bit color. If you need further assistance, contact your PC system administrator.

11.3 Connecting the AutoDome Junior HD to the PC

- 1. Install the AutoDome Junior HD according to the instructions in the *AutoDome Junior HD User Manual*.
- 2. Connect an Ethernet cable from the AutoDome Junior HD RJ45 connector to a dedicated network switch to bypass the Local Area Network (LAN).
- 3. Connect the dedicated network switch to the RJ45 connector on the PC (see option A below).



NOTICE!

The AutoDome Junior HD can also be connected directly to a PC using an Ethernet crossover cable with RJ45 connectors (see option B below).

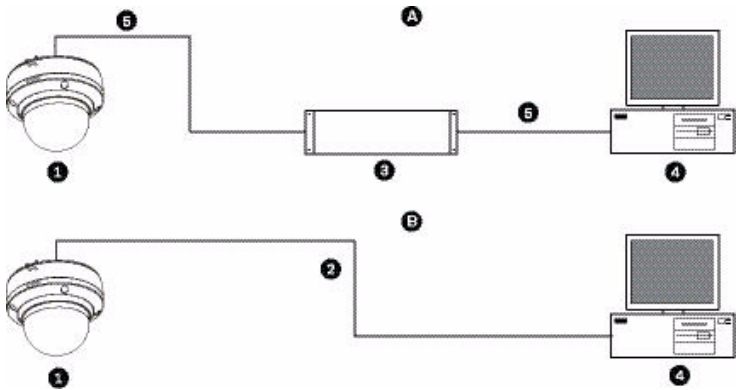


Figure 11.1 AutoDome Junior HD System Configuration

1	AutoDome Junior HD
2	IP Connection
3	Network Switch
4	Computer

NOTICE!

You can also use the Bosch Configuration Manager utility to configure the network settings for an AutoDome Junior IP or HD camera. Go to www.boschsecurity.com to download the Configuration Manager software and Operating Manual.

11.4 Configuring the AutoDome Junior HD Camera

To operate the camera in your network you must assign it a valid network IP address. The default IP address is 192.168.0.1, but you may have to change this address if it conflicts with another device on your network. Refer to *Section 12.3 Basic Mode: Network, page 82* for more information.

To properly configure the camera for your network, you need the following information:

- Unit IP address: An identifier for the camera on a TCP/IP network. For example, 140.10.2.110 is a valid syntax for an IP address.
- Subnet mask: A mask used to determine what subnet an IP address belongs to.
- Gateway IP address: A node on a network that serves as an entrance to another network.
- Port: An endpoint to a logical connection in TCP/IP and UDP networks. The port number identifies the use of the port for use through a firewall connection.

NOTICE!

Ensure that the network parameters of your cameras are available before you begin configuration.

The AutoDome Junior IP defaults are as follows:

- IP Address: 192.168.0.1
- Subnet Mask: 255.255.255.0
- Gateway IP Address: 0.0.0.0

The following sections provide instructions about installing the software necessary to view images over an IP connection, configuring the IP network settings and accessing the AutoDome Junior IP images from a Web browser.

11.4.1 Changing the Network Settings

The AutoDome Junior IP has a default IP address of 192.168.0.1. To change the IP address or any network settings, you can use the Configuration Manager software or the AutoDome Junior IP server.



NOTICE!

Contact your local network administrator for a valid IP address, Subnet Mask, and a Gateway IP Address.

Using the Configuration Manager

Configuration Manager is an optional network utility provided on the Bosch Security Systems Web site. Use the Configuration Manager Manual to make any configuration changes.



NOTICE!

Depending on the PC network security settings, the user may have to add the new IP address to the browser's **trusted sites** list for the AutoDome Junior HD controls to operate.

Using the AutoDome Junior HD Web Server

To configure the camera using the AutoDome Junior HD server, do the following:

1. Set the IP address on the PC to 192.168.0.10 to ensure that the PC and the IP AutoDome are on the same Subnet.
2. Launch Microsoft Internet Explorer and navigate to the following URL: <http://192.168.0.1>

The Web browser opens the LivePage for the AutoDome Junior HD; a security warning message is displayed.

3. Check the **Always Trust** box, then click **YES**.
4. Click the **Settings** link, located at the top of the **LivePage**.
5. Click the **Service Settings** link, located in the left pane of the **Settings** window.
6. Click the **Network** link to open the **Network Settings** page.

Network

Ethernet:

IP address: [Reboot after 'Set' necessary.](#)

Subnet mask: [Reboot after 'Set' necessary.](#)

Gateway address: [Reboot after 'Set' necessary.](#)

DNS address: [Reboot after 'Set' necessary.](#)

[Details >>](#)

SNMP

SNMP On/Off:

1. SNMP host address:

2. SNMP host address:

SNMP traps:

802.1x

Authentication:

Identity:

Password:

DHCP

Automatic IP assignment: [Reboot after 'Set' necessary.](#)

[Set](#)

Figure 11.2 Network Settings Page

7. Configure the settings on this page based on the addresses provided by your local network administrator.



NOTICE!

Click the **Help on this page?** link if you need more information.

8. Click the Set button to save the settings.
9. Launch another instance of Microsoft Internet Explorer.
10. Type the original IP address followed by /reset (for example, <http://192.168.0.1/reset>) in the address bar and click Go to restart the AutoDome Junior IP. Once you restart the AutoDome Junior IP, use the new IP Address to access the LivePage.
11. Disconnect the AutoDome Junior IP Ethernet cable from the dedicated network switch and reconnect the Ethernet cable to the local area network (LAN).

11.5 The Livepage

Once the connection is established, the Web browser displays the **Livepage**. It shows the live video image on the right of the browser window. Depending on the configuration, various text overlays may be visible on the live video image.

Other information may be shown next to live video image on the **Livepage**. The display depends on the settings on the **Livepage Configuration** page (see the AutoDome Junior IP online help).

Display Stamping

Various overlays or “stamps” in the video image provide important status information. The overlays provide the following information:



Decoding error. The frame might show artefacts due to decoding errors. If subsequent frames reference this corrupted frame, they might also show decoding errors as well but won't be marked with the “decoding error” icon.



Alarm flag set on media item



Communication error. Any kind of communication error is visualized by this icon. Cause can be a connection failure to the storage medium, a protocol violation with a sub component or simply a timeout. An automatic reconnection procedure is started in the background in order to recover from this error.



Gap; no video recorded



Watermarking not valid



Watermarking flag set on media item



Motion flag set on media item



Discovery of storage not completed. If the information about recorded video is not cached, a discovery procedure is started in order to find all recorded video. During this time, the “discovery” symbol is shown. While discovery is executed, gaps might be shown in places which the discovery has not yet reached. The gap will automatically be replaced by the true video, as soon as the correct information is available.

Maximum Number of Connections

If you do not connect, the unit may have reached its maximum number of connections. Depending on the unit and network configuration, each AutoDome Junior IP can have up to 25 Web browser connections or up to 50 connections via the Bosch Video Management System.

Protected AutoDome Junior IP

If the AutoDome Junior HD is password protected against unauthorized access, the Web browser displays a corresponding message and prompts you to enter the password when you attempt to access protected areas.



NOTICE!

An AutoDome Junior IP offers the option to limit the extent of access using various authorization levels (see the AutoDome Junior IP online help).

1. Enter the user name and associated password in the corresponding text fields.
2. Click **OK**. If the password is entered correctly, the Web browser displays the page that was called up.

Protected Network

If a RADIUS server is employed in the network for managing access rights (802.1x authentication), the AutoDome Junior HD must be configured accordingly, otherwise no communication is possible.

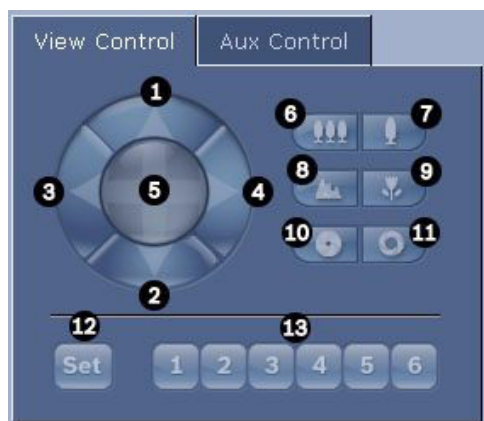
Image Selection

You can view the image of the camera in different displays.

- Click one of the tabs **Stream 1**, **Stream 2**, or **M-JPEG** below the video image to toggle between the different displays of the camera image.

View Control

The View Control tab allows you to control camera functions (pan, tilt, zoom, focus, and iris), navigate through on-screen menus and to view preset shots. (Not applicable with the AutoDome Junior HD Fixed camera)



Reference #	Description	Reference #	Description
1	Tilts the camera up	8	Focus far ²
2	Tilts the camera down	9	Focus near ²
3	Pans the camera to the left	10	Iris close ²
4	Pans the camera to the right	11	Iris open ²
5	Pans and tilts the camera in all directions	12	Sets the PTZ speed for controls 1, 2, 3, 4, 5, 6, and 7
6	Zoom out ¹	13	Moves the camera to pre-set shot numbers 1, 2, 3, 4, 5, and 6
7	Zoom in ¹		
1. This function is also accessible by using the mouse scroll wheel while in the Live video frame.			
2. This button is also used as the "Enter" button to select menu items from the AUX tab.			

1. To control a peripheral, click the appropriate controls.
2. Move the mouse cursor over the video image. Additional options for controlling peripherals are displayed with the mouse cursor.

3. To manually pan throughout the image area, move your cursor over any part of the live video. The image area displays a directional arrow (↶↷↵↶↷↵↶↷↵↶↷↵), then click and hold the right mouse key to pan the camera.

Digital I/O

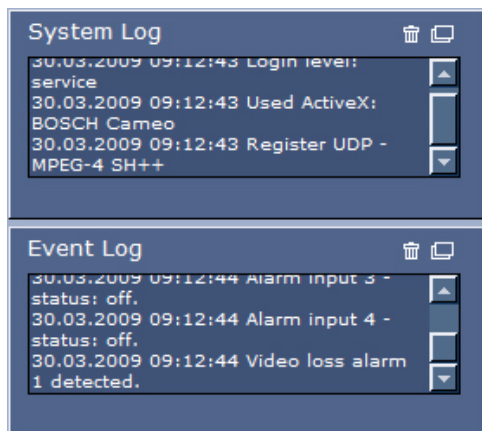
The alarm icon is for information purposes and indicates the status of an alarm input: When an alarm is triggered, the icon lights up blue. The device's configuration determines whether the alarm is displayed, as well as additional details (see the AutoDome Junior HD online help).

Triggering Relay

You can switch connected units using the relays in the AutoDome Junior HD (for example lights or door openers).

- To activate this, click the icon for the relay next to the video image. The icon will be red when the relay is activated.

System Log / Event Log



The **System Log** field contains information about the operating status of the AutoDome Junior IP and the connection. You can save these messages automatically in a file (see the AutoDome Junior online help).

Events such as the triggering or end of alarms are shown in the **Event Log** field. You can save these messages automatically in a file (see the AutoDome Junior online help).

1. If you want to delete the entries, click the delete icon in the top right-hand corner of the relevant field.
2. If you want to view a detailed log, click the icon in the top right-hand corner of the relevant field. A new window will open.

11.5.1 Entering a Keyboard Control Command

The Aux Control tab is used to enter keyboard control commands. These commands are composed of a command number plus the appropriate function key (Show Shot, Set Shot Aux On or Aux Off). A valid combination either issues a command to the camera or displays an on-screen menu.

Aux Control Tab

The Aux Control tab is used to enter pre-programmed keyboard control commands.

To access the Aux Control tab, navigate to the Livepage and click the Aux Control tab (see *Figure 11.3* below).

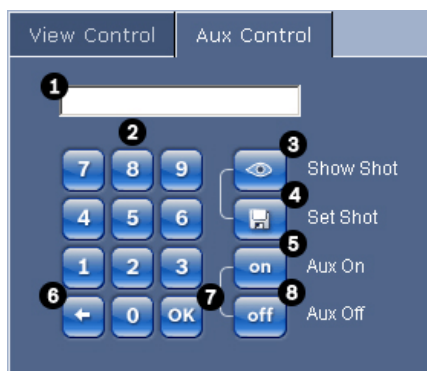


Figure 11.3 Aux Control Tab

1	Command number field
2	Keypad (numbers 0-9)
3	Show a preset shot
4	Set a preset shot
5	Initiates a command
6	Deletes a number in the Command Number field
7	Used to select a menu item
8	Stops a command

To Enter a Keyboard Control Command:

1. Place the cursor in the Command Number field.
2. Click the desired command number via the on-screen keypad.
3. Click either the Aux On or the Aux Off button to initiate or stop the command.
4. If the command initiates a menu, use the Up/Down arrows on the View Control to navigate the menu. Click the Focus or Iris button to select a menu item.

To Set a Preset Shot:

Preset shots (or scenes) are camera positions that are saved in memory for future use.

1. Move your cursor over the live image and wait for the area to display a directional arrow.
2. Click and hold a mouse button to pan to the desired position you want to save.
3. Click any number combination from 1-64 from the on-screen keypad to identify the scene number.
4. Click the Set Shot button. The image area displays a message that indicates which shot number was saved.

To View a Preset Shot:

1. Click the number of the scene you want to view using the on-screen keypad.
2. Click the Show Shot button.

**NOTICE!**

For more information about the AutoDome Junior IP settings and controls, click the **Help on this page?** link to open the AutoDome Junior online help.

11.6 Commissioning the AutoDome Junior Fixed Camera

The remote commissioning feature simplifies installation by allowing operators to position and zoom the camera via a remote head-end unit.

This section provides instructions for setting the position and the zoom level for an AutoDome Junior HD Fixed camera (VJR-F801 Series).

Using the Built-in Web Server:

1. Launch Microsoft Internet Explorer and navigate to the IP Address for the AutoDome Junior HD Fixed camera.
The Web browser opens the Livepage.
2. Type the password for the **Service** level user.
3. Click the **SETTINGS** link in the upper section of the window.
The Web browser opens a new page with the configuration menu.
4. Click the **Advanced** Link; then click the **Camera** link, located in the left pane of the Settings window.
5. Click the **Installer Menu**, located under the Camera link.
6. Click the **Open** button to the right of View Control to open the View Control window.

Note: The View Control window is disabled 15 minutes after you open the window. If the View Control window is disabled, you must close the window then re-open to resume setting the camera position and zoom level.

7. Use the View Control arrow keys and the zoom keys to establish the desired view.
Note: The AutoDome Junior HD fixed camera pans, tilts, and zooms at a much slower rate compared to a Pan/Tilt/Zoom dome camera.
8. Close the View Control window to set the camera's position and the zoom level.
9. Click the **LIVEPAGE** link, in the upper section of the window.
10. To reset the position and zoom level, repeat these steps.

11.7 Saving Snapshots

You can save individual images from the video sequence currently shown on the **Livepage** in JPEG format on your computer's hard drive. The icon for recording single images is only visible if the unit is configured to enable this process.

- ▶ Click the icon. The storage location depends on the configuration of the AutoDome Junior HD.



11.8 Recording Video Sequences

You can save sections of the video sequence currently shown on the **Livepage** on your computer's hard drive. The icon for recording video sequences is only visible if the unit is configured to enable this process.

1. Click the icon to start recording. The storage location depends on the configuration of the AutoDome Junior HD. A red dot in the icon indicates that recording is in progress.



2. Click the icon again to stop recording.
3. To change the storage location for the recorded video, navigate to the Livepage settings on the Settings page.



NOTICE!

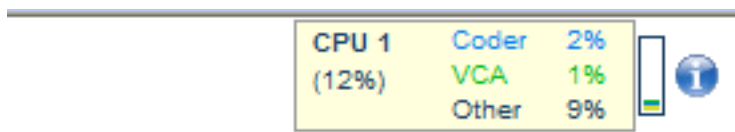
You can play back saved video sequences using the Player from Bosch Security Systems, which can be installed from the product CD supplied.

Image Resolution

Sequences are saved at the resolution that has been preset in the configuration for the encoder (see *Section 12.3 Basic Mode: Network, page 82*).

11.9 Processor Load

If the AutoDome Junior IP is accessed via the Web browser, you will see the processor load indicator in the top left of the window next to the manufacturer's logo.



You can obtain additional information to help when you troubleshoot or fine-tune the unit. The values indicate the proportions of the individual functions on the encoder load, shown as percentages.

- Move the cursor over the graphic indicator. Some additional numerical values are also displayed.

11.10 The RECORDINGS Page

The **RECORDINGS** page for playing back recorded video sequences can be accessed from the **LIVEPAGE** and from the **SETTINGS** menu.

The **RECORDINGS** link is only visible if a storage medium has been selected.

- Click the **RECORDINGS** link in the navigation bar in the upper section of the window. The playback page appears.

Selecting Recordings

All sequences that are saved are displayed in the list. A running number (track) is assigned to each sequence. Start time and stop time, recording duration, number of alarms, and recording type are displayed.

1. Click a list entry. The playback for the selected sequence starts immediately in the video window.
2. Use the arrow buttons below the list to browse the list.
3. Select the number of entries that are displayed simultaneously.

Controlling a Playback

You will see a time bar below the video image for quick orientation. A green arrow above the bar indicates the position of the image currently being played back within the sequence. The time bar offers various options for navigation. Red bars indicate the points in time where alarms were triggered. Drag the green arrow to navigate to these points quickly.

1. You can change the time interval by clicking the zoom keys (magnifying glass icons). The display can span a range from two months to a few seconds.
2. Drag the green arrow to the point in time at which playback should begin. The date and time display below the bar provides orientation to the second.

Buttons

You can control playback by means of the buttons below the video image. The buttons have the following functions:



Start or pause playback



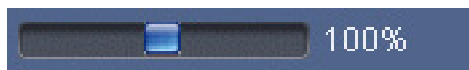
Leap to the start of the active video sequence or to the previous sequence



Leap to the start of the next video sequence

Slide Control

You can use the slide control to control playback speed.



Bookmarks

In addition, you can set markers in the sequences, so-called bookmarks, and leap directly to these. These bookmarks are indicated as small yellow arrows above the time interval. Use the bookmarks as follows:



Jump to the previous bookmark



Set bookmark



Jump to the following bookmark



NOTICE!

Bookmarks are only valid while you are in the **RECORDINGS** page; they are not saved with the sequences. As soon as you leave the page all bookmarks are deleted.

12 Configuring the AutoDome Junior HD

The **SETTINGS** page provides access to the configuration menu, which contains all the unit's parameters arranged in groups. You can view the current settings by opening one of the configuration screens. You can change the settings by entering new values or by selecting a predefined value from a list field. There are two options for configuring the unit or checking the current settings:

- Basic mode
- Advanced mode

In **Basic Mode** the most important parameters are arranged in seven groups. This allows you to change the basic settings with just a few entries and then put the device into operation.

Advanced Mode is recommended for expert users or system support personnel. You can access all unit parameters in this mode. Settings that affect the fundamental functionality of the unit (such as firmware updates) can only be altered in the advanced mode.

All parameter groups are described in this chapter in the order in which they are listed in the configuration menu, from the top of the screen to the bottom.



CAUTION!

The settings in the advanced mode should only be processed or modified by expert users or system support personnel.

All settings are backed up in the AutoDome Junior HD memory so they are not lost even if the power fails.

Starting Configuration

- Click the **SETTINGS** link in the upper section of the window. The Web browser opens a new page with the configuration menu.

Navigation

1. Click one of the menu items in the left window margin. The corresponding submenu is displayed.
2. Click one of the entries in the submenu. The Web browser opens the corresponding page.

Making Changes

Each configuration screen shows the current settings. You can change the settings by entering new values or by selecting a predefined value from a list field.

- After each change, click **Set** to save the change.



CAUTION!

Save each change with the associated **Set** button.

Clicking the **Set** button saves the settings only in the current field. Changes in any other fields are ignored.

12.1 Basic Mode: Device Access

Camera name

You can give the AutoDome Junior HD a name to make it easier to identify. The name makes the task of administering multiple units in larger video monitoring systems easier, for example using the Bosch Video Management System programs.

The device name is used for the remote identification of a unit, in the event of an alarm for example. For this reason, enter a name that makes it as easy as possible to quickly identify the location.



CAUTION!

Do not use any special characters, for example **&**, in the name. Special characters are not supported by the system's internal recording management and may therefore result in the Player or Archive Player being unable to play back the recording.

Password

An AutoDome Junior HD is generally protected by a password to prevent unauthorized access to the unit. You can use different authorization levels to limit access.

The AutoDome Junior HD operates with three authorization levels: **service**, **user** and **live**.

The highest authorization level is **service**. After entering the correct password, you can access all the functions of the AutoDome Junior HD and change all configuration settings. With the **user** authorization level, you can operate the unit and also control cameras, for example, but you cannot change the configuration.

The lowest authorization level is **live**. It can only be used to view the live video image and switch between the different live image displays.

You can define and change a password for each authorization level if you are logged in as **service** or if the unit is not password protected.

Enter the password for the appropriate authorization level here. The maximum text length is 19 characters.

NOTICE!



Proper password protection is only guaranteed when all higher authorization levels are also protected with a password. If a **live** password is assigned, for example, a **service** and a **user** password must also be set. When assigning passwords, you should therefore always start from the highest authorization level, **service**, and use different passwords.

Confirm password

In each case, enter the new password a second time to eliminate typing mistakes.

NOTICE!



A new password is only saved when you click the **Set** button. You should therefore click the **Set** button immediately after entering and confirming a password.

12.2 Basic Mode: Date/Time

Device date/Device time/Device time zone

If there are multiple devices operating in your system or network, it is important to synchronize their internal clocks. For example, it is only possible to identify and correctly evaluate simultaneous recordings when all units are operating on the same time. If necessary, you can synchronize the unit with your computer's system settings.

- Click the **Sync to PC** button to copy your computer's system time to the AutoDome Junior HD.

Time server IP address

The AutoDome Junior HD can receive the time signal from a time server using various time server protocols, and then use it to set the internal clock. The unit polls the time signal automatically once every minute.

- Enter the IP address of a time server here.

Time server type

Select the protocol that is supported by the selected time server. Preferably, you should select the **SNTP server** as the protocol. This supports a high level of accuracy and is required for special applications and subsequent function extensions. Select **Time server** for a time server that works with the protocol RFC 868.

12.3 Basic Mode: Network

The settings on this page are used to integrate the AutoDome Junior HD into an existing network.

Some changes only take effect after the unit is rebooted. In this case, the **Set** button changes to **Set and Reboot**.

1. Make the desired changes.
2. Click the **Set and Reboot** button. The AutoDome Junior HD is rebooted and the changed settings are activated.

**CAUTION!**

If you change the IP address, subnet mask or gateway address, the AutoDome Junior HD is only available under the new addresses after the reboot.

DHCP

If a DHCP server is employed in the network for the dynamic assignment of IP addresses, you can activate acceptance of IP addresses automatically assigned to the AutoDome Junior HD. Certain applications (VIDOS, Bosch Video Management System, Archive Player, Configuration Manager) use the IP address for the unique assignment of the unit. If you use these applications, the DHCP server must support the fixed assignment between IP address and MAC address, and must be appropriately set up so that, once an IP address is assigned, it is retained each time the system is rebooted.

IP address

Enter the desired IP address for the AutoDome Junior HD in this field. The IP address must be valid for the network.

Subnet mask

Enter the appropriate subnet mask for the selected IP address here.

Gateway address

If you want the unit to establish a connection to a remote location in a different subnet, enter the IP address of the gateway here. Otherwise leave the box blank (**0.0.0.0**).

12.4 Basic Mode: Encoder

Default profile

You can select a profile for encoding the video signal.

You can use this to adapt the video data transmission to the operating environment (for example network structure, bandwidth, data load).

Pre-programmed profiles are available, each giving priority to different perspectives. When selecting a profile, details are displayed in the list field.

- **HD High high quality / low latency**

Target bit rate: 5000 kbps

Maximum bit rate: 10000 kbps

Encoding interval: 30.00 ips

- **High Resolution 2**

Target bit rate: 1500 kbps

Maximum bit rate: 3000 kbps

Encoding interval: 30.00 ips

- **Low Bandwidth**

Target bit rate: 700 kbps

Maximum bit rate: 1500 kbps

Encoding interval: 30.00 ips

- **DSL**

Target bit rate: 400 kbps

Maximum bit rate: 500 kbps

Encoding interval: 30.00 ips

- **ISDN (2B)**

Target bit rate: 80 kbps

Maximum bit rate: 100 kbps

Encoding interval: 30.00 ips

- **ISDN (1B)**

Target bit rate: 40 kbps

Maximum bit rate: 50 kbps

Encoding interval: 30.00 ips

- **Modem**

Target bit rate: 20 kbps

Maximum bit rate: 22 kbps

Encoding interval: 15.00 ips

- **GSM**

Target bit rate: 7 kbps

Maximum bit rate: 8 kbps

Encoding interval: 7.50 ips

12.5 Basic Mode: Audio

You can set the gain of the audio signals to suit your specific requirements. The current video image is shown in the small window next to the slide controls to help you check the audio source and improve assignments. Your changes are effective immediately.

If you connect via Web browser, you must activate the audio transmission on the **Livepage Functions** page (see *Section 11.5 The Livepage, page 66*). For other connections, the transmission depends on the audio settings of the respective system.

Audio

The audio signals are sent in a separate data stream parallel to the video data, and so increase the network load. The audio data are encoded according to G.711 and require an additional bandwidth of approx. 80 kbps for each connection. If you do not want any audio data to be transmitted, select Off.

Line In

You can set the line input gain. Make sure that the display does not go beyond the green zone during modulation.

12.6 Basic Mode: Recording

You can record the images from the AutoDome Junior HD on various local storage media or on an appropriately configured iSCSI system.

Here you can select a storage medium and immediately start the recording.

Storage medium

1. Select the required storage medium from the list.
2. Click the **Start** button to start the recording immediately.

12.7 Basic Mode: System Overview

The data on this page are for information purposes only and cannot be changed. Keep a record of this information in case technical assistance is required.

**NOTICE!**

You can select all required text on this page with the mouse and copy it to the clipboard with the [Ctrl]+[C] key combination, for example if you want to send it via e-mail.

13 Keyboard Commands by Number

Alarm Rule Output	Function Key	Comm No.	Command	Description
Y	On/Off	1	Scan 360°	Autopan without limits
Y	On/Off	8	Play Pre-position Tour	Activate/Deactivate standard tour
Y	On/Off	18	AutoPivot Enable	Enables/disables AutoPivot
Y	On/Off	20*	Backlight Comp	Toggles Backlight Compensation
Y	On/Off	43*	Auto Gain Control	Toggles AGC
Y	On/Off	60*	On Screen Display	On–enable Off–disable
Y	On/Off	80*	Digital Zoom Lock	Turns digital zoom on and off
Y	On/Off	86	Sector Blanking	Enables/Disables Sector Blanking

* denotes a command applicable to the AutoDome Junior HD PTZ and Fixed cameras.

14 Preventive Maintenance

The following preventive maintenance schedule allows detection and correction of minor faults before they become serious and cause equipment failure. Periodically perform the following:

- Inspect all connecting cables for deterioration or other damage.
- Wipe housing with a clean damp cloth.
- Clean the dome/windows with an approved P.C (LEXAN) Cleaner (Novus LEXAN cleaner-plastic polish).
- Verify that all the mounting hardware is secure.

When cleaning the dome bubble heed these warning:

- Do not use alcohol-based solutions to clean the bubble. This will cause the bubble to cloud and over time cause stress aging, which makes the bubble brittle.
- Do not use abrasive or highly alkaline cleaners on the bubble.
- Do not scrape the bubble with razor blades or other sharp instruments.
- Do not use Benzene, Gasoline, Acetone, or Carbon Tetrachloride on the bubble.
- Do not clean bubbles in direct sunlight or on very hot days.

15 Troubleshooting

If you experience difficulties operating your AutoDome Junior camera, refer to the following. If the guidelines do not enable you to solve the problem, contact an authorized technician.

Problem	Check
Need to remove trim ring.	Use a slotted screw driver and push the clips outward while gently pulling down on the edge of the trim ring.
Nothing appears on the screen.	Are the power cord and line connection between the camera and monitor made properly?
The image on the screen is dim.	Is the lens dirty? If so, clean the lens with a soft, clean cloth.
The contrast on the screen is too weak.	Adjust the contrast feature of the monitor. Is the camera exposed to strong light? If so, change the camera position.
The image on the screen is flickers.	Does the camera face directly into the sun or fluorescent lighting? If so, reposition camera.
The image on the screen is distorted.	Is the power frequency set properly in sync? If the power frequency is not set correctly, the line lock synchronization mode cannot be used. Set the synchronization mode to INT.NTSC Model power frequency in LL mode: 60 Hz.

15.1 AutoDome Junior Operation and Control

Problem	Solution
No Network Connection	– Check all network connections – Ensure that the maximum distance between any two Ethernet connections is 100 m (328 ft) or less. If O.K., then: – If you are behind a firewall, ensure that the Video Transmission mode is set to UDP. a. Access the Settings Web page for the IP-enabled device. b. Expand the Service Settings link, then click Network. c. Select UDP from the Video Transmission drop-down list. Then click Set.
Video is distorted (AutoDome Junior HD)	– Navigate to the SETTINGS page. – Click the Advanced Link; then click the Camera link, located in the left pane of the Settings window. – Click the Installer Menu, located under the Camera link. – Select either 50 or 60 Hz from the Frequency pull-down list.

16 BVIP Firmware Updates

The AutoDome Junior IP and HD incorporate a network video server in the IP module. The primary function of the server is to encode video and control data for transmission over a TCP/IP network. The AutoDome Junior IP and HD also allows an operator to update the BVIP firmware via the TCP/IP network. The latest BVIP firmware is available on the Bosch Security Systems Web site. To download the service pack from the Web, navigate to www.boschsecurity.us, click the CCTV link, then click Cameras, PTZ and navigate to the product page for the AutoDome Junior IP and HD . Then click the Software tab on the product page.

16.1 Upgrading the AutoDome Junior IP or HD

The preferred method to update an AutoDome Junior IP or HD is through a direct connection between the camera and a PC. This method entails connecting the Ethernet cable from the camera directly to the Ethernet port of a PC.

If the direct-connect method is not practical you can also update the AutoDome Junior IP through a Local Area Network (LAN). You cannot, however, update the AutoDome Junior IP or HD through a Wide Area Network (WAN) or via the Internet.

16.2 Beginning the Firmware Update Process

Use this procedure to connect to your AutoDome Junior IP or HD and to navigate to the Firmware Update page.

1. Launch Internet Explorer and type the IP address for the AutoDome Junior IP in the Address bar and click Go. Internet Explorer opens the Livepage view.
2. Click the SETTINGS link, located at the top of the page.
3. Click the Service link in the left pane.
4. Click the Maintenance link below the Service link.
5. Click the Search button and navigate to the firmware file (*.fw). Then, click OK.
6. Click the Upload button.
7. Click OK to the warning message to continue the firmware upload, or Cancel to stop the upload.

The page displays a progress bar as the firmware is uploaded.

Note: Once the progress bar reaches 100% the system opens the reset page. Allow the reset page to complete its action.

8. Once the reset is complete the upgrade is complete.

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